ARAM 26:1&2 (2014), 327- 334

THE HURRIAN MUSICAL TEXT H6: *A NEW INTERPRETATION*

RICHARD DUMBRILL
(London – UK)

I - INTRODUCTION

H6 is part of a collection of 29 cuneiform tablets unearthed during the pre and post war Missions at Ras Shamra, Syria, conducted by the French scholar Claude Schaeffer.[1] The tablets are written in Hurrian,[2] unrelated to Semitic languages, with Babylonian signs. The scribes who wrote these texts were native Babylonian speakers, accounting for their usage of Hurrianised Babylonian. The tablets would all have had the same rectangular shape. The writing is parallel to the longest side, and is divided in three. The first part varies with each tablet, but generally the text continues onto the obverse. The text usually consists of one paragraph, which ends by a double line, with a double *winkelhaken,* at the beginning and at the end, on the obverse.

The second part spreads below the double line, with Hurrianised Babylonian musical terms, followed, in most cases, by a number, and sometimes preceded, or followed, by an adjective. The first part gives the verse, the second music and rhythm. The third part is the colophon written at the bottom edge of the tablet, and says that it is ' . . . a song in the pitch set of 'x', followed by an adjective and deities to whom the song is devoted. Follows the name of a scribe. Two of them are mentioned in the texts. There is a certain *Ammurabi*, another, *Ipšali*, and four Hurrian composers: *Tapšiḫun*, *Puḫiyanna*, *Urḫiya* and *Ammiya*. This is to our knowledge the first instance when composers are named, in world music history. Regrettably, H6 = (RŠ13.30 + 15.49 + 17.387) is the only tablet which came reasonably intact to us. (reconstructed from three fragments)

There has been a substantial amount of attempts at interpreting this tablet, which has the oldest musical notation ever found, and the names of Wulstan (1971),[3] Kilmer (1974),[4] Duchesne-Guillemin (1977),[5] Vitale (1982),[6] Černý (1988),[7] West (1993),[8] Monzo (2000),[9] Krispijn (2000),[10] Halperin

---

[1] Nougayrol, J.; Boyer, G.; Laroche, E., Le Palais Royal d'Ugarit III et Planches, in *Mission de Ras Shamra*, Tome IV. Schaeffer, C. F-A (ed.) (Paris, 1955); Courtois, J-C.; Contenson, H., de; Kusche, A.; Vallois, H-V.; Ferembach, D; Dastugue, J.; Charles, R.; Clairmont, Ch.; Miles, G. C., *UGARITICA* IV, C. F-A Schaeffer, (ed.) (Paris, 1962); Nougayrol, J.; Laroche, E.; Virolleau, Ch.; Schaeffer, C. F-A. *UGARITICA* V, C. F-A Schaeffer, (ed.) (Paris, 1968)

[2] Hurrian is an ergative agglutinative language which with Urartian, constitutes the Hurro-Urartian family. Diakonoff and Starostin see similarities between Hurrian and Northeast Caucasian languages, and place it in the Alarodian family. Examples of the proposed phonological correspondences are PEC *l- > Hurrian t-, PEC *-dl- > Hurrian -r- (Diakonoff & Starostin). The Hurrians migrated to northern Mesopotamia around 2300 BC and had mostly vanished by 1000 BC. It was the language of the kingdom of Mitanni, in northern Mesopotamia, and was likely to be spoken at least initially in Hurrian settlements in Syria and notably Ugarit. It is generally believed that the speakers of this language originally came from the Armenian mountains and spread over southeast Anatolia and northern Mesopotamia at the beginning of the 2nd millennium BC.

[3] Wulstan, D., The Earliest Musical Notation, *Music and Letters* 52 (1971), pp. 365-382.
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Wulstan1971.mid ;
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Wulstan1971.pdf

[4] Kilmer, A.D., The Cult Song with Music from Ancient Ugarit: Another Interpretation, *Revue d'Assyriologie* 68, (1974), pp. 69-82; Kilmer, A.D, Crocker, R.L, Brown, R.R. Sounds from Silence: Recent Discoveries in Ancient Near Eastern Music *BIT ENKI Publications* (Berkeley 1976) 22 pages booklet and 12" stereo LP recording.
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Kilmer1974.mid;
http://individual.utoronto.ca/seadogdriftwood/HurrianHymnNo6Kilmer1974.pdf

[5] Duchesne-Guillemin, M., A Musical Score from Ugarit: The Discovery of Mesopotamian Music. *Sources from the Ancient Near East*, 2 (1982) 5-24.
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Duchesne-Guillemin1977.mid;
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Duchesne-Guillemin.pdf

[6] Vitale, R., http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Vitale1982.mid;
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Vitale1982.pdf

(2008),[11] figure among the most notorious.[12] However, all illustrate, in their interpretation, (which are quite similar, axiomatically) the indelible stain of nineteen century Western musical imperialism, in that their decipherment has been undertaken, in all cases, under the exclusive light of (or obnubilated by) Western concepts of music theory.

The present paper will demonstrate that when Near and Middle Eastern music theory serves the interpretation of H6, the melody which emerges satisfies the principles of the *maqam* form, unsurprisingly, since there is no logical reason, whatsoever, for having attempted at interpreting an Oriental composition with Occidental epistemology.

II - OCCIDENTAL *VERSUS* ORIENTAL MUSIC THEORY

Therefore, in 1960, it had been assumed and authoritatively published that the theory exposed in CBS 10996[13], was, *de facto*, related to Western theory, without even considering that it would be more likely related to Near and Middle Eastern music.

Essentially, CBS 10996, a crucial tablet for the decipherment of our text, is a list of pairs of numbers with a name for each pair. Numbers are given in the following sequence: 1-5; 7-5; 2-6; 1-6; 3-7; 2-7; 4-1; 1-3; 5-2; 2-4; 6-3; 3-5; 7-4; 4-6. It is immediately obvious that the sequence is broken because it is restricted to a span of seven degrees and as a consequence some intervals must be to be inversed.

Firstly, and unwisely, a majority of scholars jumped to the conclusion that these pairs equated to empty intervals, or dyads, and therefore read 1-5 as a fifth; 5-2 as a third; 2-6 as a fifth; 1-6 as a sixth; 3-7 as a fifth; 2-7 as a sixth; 4-1 as a fourth, etc. Secondly it was assumed that their polarisation would be ascending without any evidence for it. Thirdly it was assumed that these pairs should be sounded simultaneously, as dyad chords, and fourthly it was assumed that the system was restricted to a span of seven degrees. These four inconceivable errors, arising from reputable scholars, (mostly with no musicological formation) led to a series of articles, spreading blunders world-wide, to this day and for decades to come.

The first false assumption came **a)** from the general view that intervals of fifths and fourths, thirds and sixths as shown in CBS10996 constituted a catalogue of intervals. This conclusion is invalid insofar as this span of seven degrees could well describe the position of intervals on an instrument restricted to a span of seven strings, but not necessarily describe a system of seven degrees where such intervals would be intentionally placed, to constitute an intervallic catalogue, and **b)** It was overlooked that the number sequence which is incoherent when restricted to a span of seven degrees, becomes coherent when spread on thirteen degrees in their logical disposition as: 1-5/7-5; 2-6/8-6; 3-7/9-7; 4-8/10-8; 5-9/11-9; 6-10/12-10 and 7-11/13-11. In contradiction with the general consensus, the Babylonian system included seven subsets of pitches spanning fifths of descending polarity as follows: e-d-c-b-a; d-c-b-a-g; c-b-a-g-f; b-a-g-f-e; a-g-f-e-d; g-f-e-d-c and f-e-d-c-b. Each of these subsets are

---

[7] Černý, (1988, 62), http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Cerny1988.mid; http://individual.utoronto.ca/seadogdriftwood/HurrianHymnNo6Cerny1988.pdf

[8] West, M.L., The Babylonian Musical Notation and the Hurrian Melodic Texts. *Music and Letters* 75/4 (1993), pp. 161-179. http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6West1993.mid; http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6West1993.pdf

[9] Monzo., http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Monzo2000.mid; http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Monzo2000.pdf

[10] Krispijn, Th.J.H., http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Krispijn2000.mid; http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Krispijn2000.pdf

[11] Halperin, D., Musical reconstruction of the Hurrian Material by Statistical Analysis. ICONEA 2008, ICONEA Publications, Dumbrill and Finkel eds., London, (2010), pp. 29-32.

[12] I am excluding my name from the list.
http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Krispijn2000.mid; http://individual.utoronto.ca/seadogdriftwood/Hurrian/HurrianHymnNo6Krispijn2000.pdf

[13] Kilmer, A., Two New Lists for Mathematical Operations, *Orientalia* 29, (1960), pp. 273-308 and Tab. LXXXIII.

different in structure, the last ending in a tritone, and each having a different name, respectively: *nīš tuḫrum; išartu; embūbu; nīd qabli; qablītu; kitmu; pītu.* Complementarily there are seven thirds of ascending polarity, each with a different name, respectively: *šēru; šalšatu; rebūtu; isqu; titur qablītu; titur išartu; serdū.* These thirds are either major or minor. These intervals, fifths and thirds, are comparable to the Arabic *ajnas* (sing. *jins*) and Arabic *'uqud* (sing. *'aqd*) of *maqam* theory which also have their specific names to distinguish them from one another in respect of their content. *Maqam* theory *ajnas* and *'uqud* have the following names: *ajam* (major third); *jiharkah* (minor third); *sikah* (third); *mustār* (third); *bayati* (tetrachord); *busalik* (tetrachord); *hijaz* (tetrachord); *kurd* (tetrachord); *nahawand* (tetrachord); *rast* (tetrachord); *saba* (tetrachord); *zamzama* (tetrachord); *nawa athar* (pentachord); *athar kurd* (pentachord). Note that they amount to 14 and so do the Babylonian subsets. There is a predominance of tetrachordal subsets which might be explained by Occidentalisation of the system. This would have happened progressively and introduced the concept of the octave which hitherto was unknown to Near and Middle Eastern theory. Additionally, there is no textual or other evidence for it[14]. It is our contention that the octave added to Oriental theory at the time of Urban the second's first Crusade 1095, or perhaps before, at the dawn of the Carolingian empire, from 800, when there is evidence of increasing exchanges between Near East and West.

The second assumption that the polarity of the system was ascending is unfounded as until Krispijn's[15] irrefutable demonstration that the system was descending, there was absolutely no ground to assume that the system was either ascending or descending.

The third postulation that the paired numbers meant dyads, which would have been sounded simultaneously, is again unfounded, as there is no evidence anywhere for it, in world music history, until around 1160 to 1250, at the School of Notre Dame in Paris, with Léonin and Pérotin. That such dyads had been conceptualised three millennia before, is simply preposterous in the absence of corpulent evidence. It was also assumed that the tuning of strings was ruled by ratios, in which case strings would be sounded, two at a time, in the Pythagorean fashion, while in fact there is evidence that to the contrary, as well demonstrated with text UET VII, 74, tuning was done by means of tension and relaxation of strings, a system which was much later borrowed by Aristoxenus of Tarentum, in the fourth century BC. This form of tuning relies on pitch perception, not on ratios, and therefore does not rely on dyads to be played simultaneously for tuning purposes. It relies on the consecutive perception of each of its pitches. This technique is still taught today to young children learning their intervals. To produce a fifth, they would sing all of its degree and then the interval: c-d-e-f-g: **c-g**, etc.

The fourth assumption that the system was heptatonic is equally flawed because this system depends on a construction which does not appear in the world corpus of theory until CBS 1766[16], a late Neo-Babylonian document written centuries after CBS 10996.

There is more divergence of opinion concerning other aspects of Babylonian music theory. It was further assumed that from the earliest evidence around 1750 years BC, the system was heptatonic when in fact it was enneatonic. It was further postulated that the system consisted of seven modes, even if the term only appears in Carolingian ecclesiastical music, over 2000 years later. There is consistent evidence of enneatonism for a period of about 2000 years[17]. A new text from the Yale

---

[14] The concept of the octave can only run along with the concept of ratios, as it is only when ratios are used, for the purpose of theory, that the octave can materialise because of its arithmetical particularity. In just intonation expressed by sexagesimal regular numbers, as was used by Babylonians, the octave is an unstable interval and this is probably why it was unrecognised. Furthermore, the spiralling theory of fifths cannot generate an octave, neither can heptatonic theory as six tones do not amount to the octave. [(6 * 9/8) ≠2/1]

[15] Krispijn, Th.J.H., *Akkadica* 70, (1990), note to line 171.

[16] Dumbrill, R., https://www.academia.edu/243915/Earliest_Evidence_of_Heptatonism

[17] Dumbrill, R., *The archaeomusicology of the Ancient Near East,* (Trafford, 2005), pp. 47-69; 'Modus Vivendi' *NEMO* 2012 (Geuthner, 2012), pp. 89-116; 'Evidence and Inference in Texts of Theory in the Ancient Near East', *ICONEA* 2008, Iconea publications, (2008), pp. 105-124; 'Music Theorism in the Ancient World' *ICONEA* 2009-2010, Gorgias Press, (2010), pp. 107-132;
https://www.academia.edu/243917/Four_Mathematical_Texts_from_the_Temple_Library_of_Nippur;
https://www.academia.edu/243925/Is_the_Heptagram_in_CBS_1766_a_Dial

collection[18] recently published by the present author attests of nine incipits, each located from one of the nine strings of the enneachord, implying nine pitches in the set. Much later, Boethius in his *Fundamentals of Music*, Book I, attests of enneatonism but attributes its 'invention' to Prosphrastus of Pieria[19].

III - FICTION AND REALITY

The colophon of tablet H6 is unequivocal. In Krispijn's transliteration, it reads: *[an-nu]-ú za-am-ma-rum ša ni-id-kib-li za-l[u]-z[i ša* DINGIR.MEŠ TA ^{m}*Urḫiya]]šu* ^{I}*am-mu-ra-bi.* This translates roughly as: 'This is a song in the scale of *nidqibli* a *zaluzi* for the gods, composed by *Urḫiya* and written by the scribe *Ammurabi'.* It does not say that this song should be sang to the accompaniment of any instrument. Kilmer and others came to the unavoidable conclusion that the song should be accompanied, only because they had previously assumed, written and taught that the intervals in CBS 10996 were simultaneously played dyads. They could not suddenly change their mind, facing this dilemma. But then, this dyadic notation presents a problem: which note should be sung by the singer, the bass or the treble? These two points should, on their own, suffice to invalidate, once and for all Kilmer's spearheading hypothesis. However, and nevertheless, there is general persistence in her support although the resulting melody is all but melodic. Therefore, the next question which arises is why Hurrians, otherwise a very refined people, would have bothered to write down such an insignificant tune? Having, it is hoped, clearly demonstrated my objections to Kilmer's views on this music, I will now explain my method.

IV METHODOLOGY

[18] https://www.academia.edu/2642606/YBC_11381_New_evidence_for_Neo-Babylonian_Enneatonism_in_Music_Theory;

[19] Bower, C.M, *Fundamentals of Music, Anicius Manlius Severinus Boethius.* Claude V. Palisca, ed. Yale University Press, New Haven & London, (1989), pp. 34 and fn. 109.; Crickmore, L., Music Theory and Practice in Ancient Times, *ARANE* 2009, Vol. I, (2009), pp. 54-5. https://www.academia.edu/243822/ARANE_2009

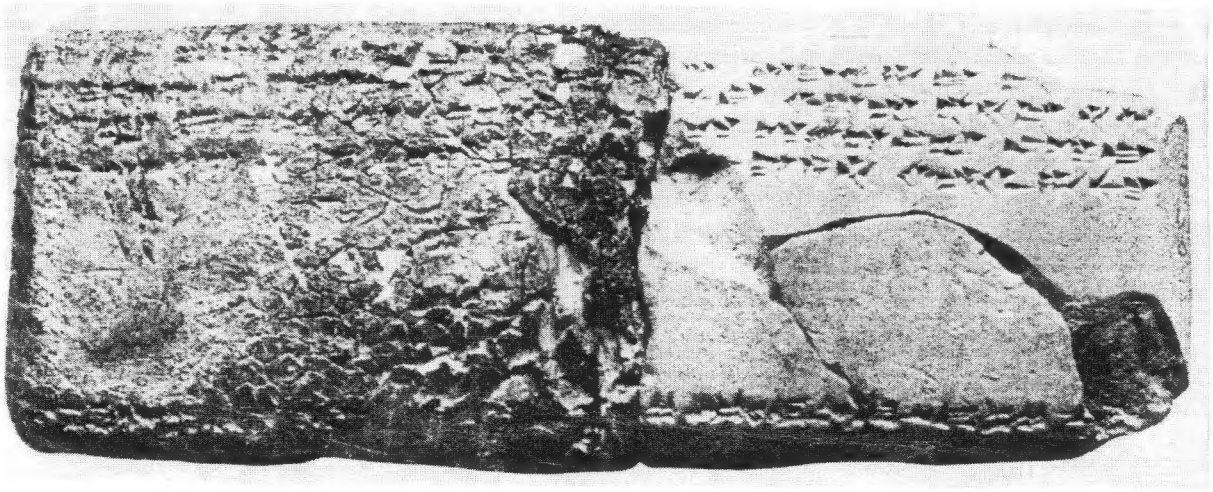


Figure 1. H6 = (RŠ13.30 + 15.49 + 17.387), Obv., top and Rev., below.

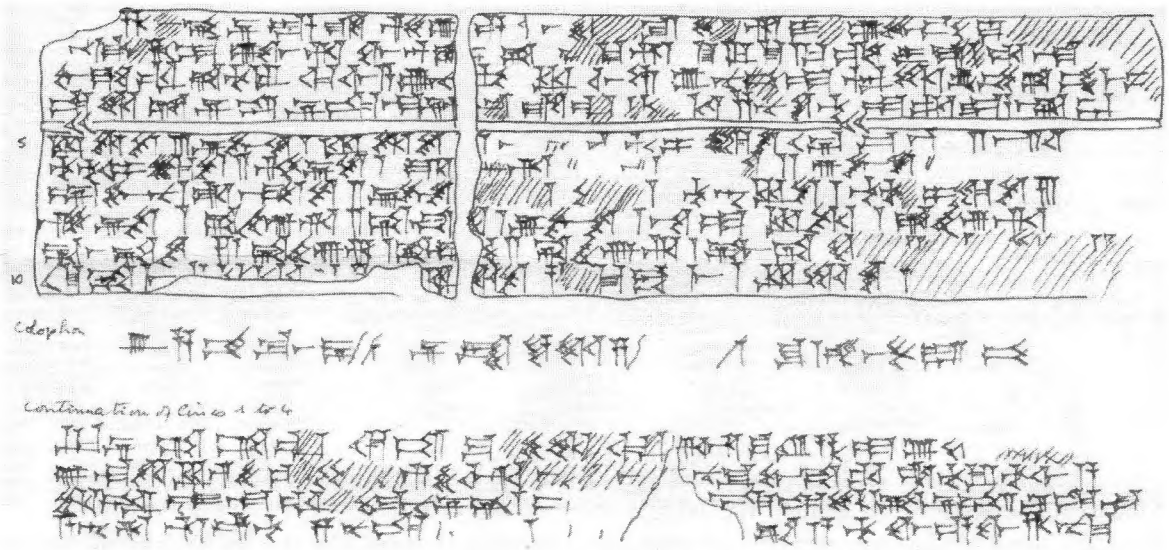


Figure 2. Hand copy by the author.

I shall only discuss music notation. Our knowledge of Hurrian is still insufficient with regard the voicing of the language, especially that it is written with Babylonian signs not ideally suited for that purpose and cannot provide with meaningful metric clues.

The colophon says that the song is in the pitch set[20] of *ni-id-kib-li.* The nature of this set has been elucidated from three texts: CBS 10996, already discussed, UET VI, 126 = *nabnitu* XXXII, and UET VII, 74[21]. It has been generally agreed, with the exception of Kilmer, that *ni-id-kib-li* (Hurrian), (*nīd*

[20] I use the term 'pitch set' because both terms 'scale' and 'mode' are improper to describe the series of pitches described in the corpus.

[21] The tablet appears in Ur Excavations Texts. *Publications of the joint expedition of the British Museum and of the University Museum of the University of Pennsylvania, Philadelphia, to Mesopotamia.* Volume VII, Middle Babylonian Legal Documents and other Texts. Oliver R. Gurney. Note the lacuna in L.4 Col.2 which was later corrected in IRAQ XLVI 82, note 1. Professor Gurney writes back to me on this matter on the 15th April 1996: '*...I must have left the end of the line for a second look because it was dirty or otherwise difficult to read and then forgotten to come back to it. This happened to me*

qablim (Babylonian) is an enneatonic descending pitch set: e-d-c-b-a-g-f-e-d. The values for each subset (pentachordal and trichordal) written is known from the transposition of the string numbers to the enneatonic set of *nīd qablim.* This is a straight forward operation. The music part of the tablet is composed from the names of subsets and of numbers following each subset:

Line 5. *qablite 3 irbute 1 kablite 3 [xx xxxx] titimišarte 10 uštamari*

Line 6. *titimišarte 2 zirte 1 šaḫri 2 zirte 2 irbute 2?*

Line 7. *umbube 1 šaššate 2 irbute 1? šaššate 2? nadqabli 1 šaḫri 2?*

Line 8. *zirte 1 šaḫri 2 šaššate 4 irbute 1 nadqabli 1 šaḫri 2?*

Line 9. *šaššate 4? šaḫri 1 šaššate 2 šaḫri 1 šaššate 2 irbute 2*

Line 10. *kitme 1 qablite 3 kitme 1 qablite 4 kitme 1*

Some numeric values could not be clearly read because of damage to the tablet.

The melodic value for the subsets in H6 is:

umbube = c-b-a-g-f =

nadqabli = b-a-g-f-e =

qablite = a-g-f-e-d =

kitme = g-f-e-d-c =

zirte = a-b-c =

šaḫri = f-g-a =

šaššate = e-f-g =

irbute = d-e-f =

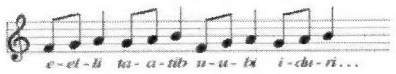
With regard metrics, each pentachordal subset has 5 pitch units and each trichordal subset has 3 pitch units. Remains to determine the length value of the numbers which follow subsets. It is my contention that the numbers were the rhythmical element of the notation and prolonged the length of the last pitch of the subset by twice the length of a unit per unit, on the grounds that nothing else would make sense. Thus *qablite* 3 would be: with a total value of 10 beats; *irbute* 1 = with a total value of 4 beats, and so forth.

The term *uštamari,* at the end of line, 5 resists interpretation, but I would advance that it separates the introduction from the song. In support of this assumption, it will be noted that all other texts in the collection having a readable left side, start with the same formulation. Tablets showing this form are H2; H7; H10 and perhaps H28? This suggests that the formulation in line 5 of H6 would have been an introductory melody common to all songs in this particular collection, probably to attract the attention of a congregation. If this were the case, this would suggest that Hurrian songs would have responded to well defined constructions for the purpose of group, and perhaps congregational singing, probably not religious on account of the contents of some of the texts. For instance, H8 has the repetition of the formula: *elli tatib ubi šiduri*, that Professor Wilhelm Gernot, translates as '...this silly girl *(šiduri)* loved...':[22]

---

several times!"; Kilmer, A., Two New Lists of Key Numbers for Mathematical Operations. *Orientalia* 29 (1960) 273-308; Kilmer, A., Two New Lists of Key Numbers for Mathematical Operations. *Orientalia* 29 (1960) 273-308.

[22] In a verbal communication at the Oriental Institute, Cambridge, March 1995, during an Erasmus seminar on the Hurrian language. *šiduri*, the 'ale-wife' encountered by Gilgameš in the course of his journey, is a Hurrian term for 'young woman' used to describe *Hebat*, a form of *Ištar* in Hurrian texts; *cf. e.g.* KUB, xxvii, 38, iv, 8; 42; obv. 23. Note also the



The melody and the rhythm are perfectly suited to the meaning of the words. Therefore, I have used the word 'song' to define the melodies in the collection as there is no reason to call them anything else. The word 'hymn' used by some colleagues is incorrect in this context as it derives from Greek *ὕμνος* = 'song of praise', which does not suit the present texts.

Some errors due to damage of the tablet were tentatively corrected and show that lines 5 to 10 would have had the following metrical values:

Line 5. 36 units

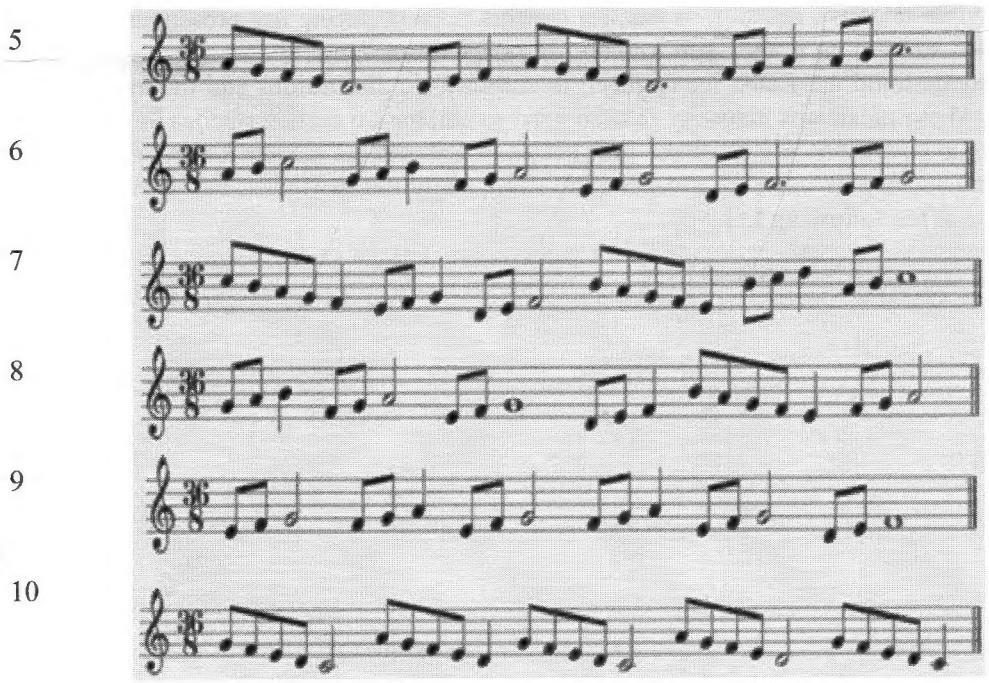
Line 7. 36 units

Line 8. 36 units

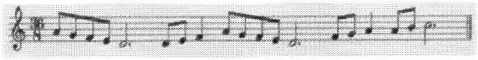
Line 9. 36 units

Line 10. 36 units

It is doubtful that this consistency would be coincidental.



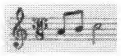
Author's interpretation of H6

Line 5 is the introduction. 

It is contended that this formulation introduced all songs in the collection, and perhaps songs in other collections. There would have been different types of introductory formulations depending on the nature of the songs, of the hymns, of the incantations, etc. Since all readable colophons in the

Hurrian fragment of the epic, KUB viii, 61 (line 4), thus confirming Jensen's old suggestion that *siduri* and *šiduri* should be equated.

collection indicate that the pitch set is *nidqibli*, it is additionally contended that this type of song would have all been sung to that pitch set and would have had the same introduction. There might have been specific words for the introduction that the congregation knew by heart and therefore would not require that they be written as they would have been the same for the whole collection.

The introduction ends by the triad  which is also the first subset of line 6. 

Thus the congregation knew their intonation of the first subset of the song. This suggests, additionally, the usage of responsorial chanting. A leader would have sung line five, the congregation responding with line 6 that they started with the last subset of line 5 as catch-line. Then, line 10 would conclude the song bringing back to line one, probably sung again by the leader.

Linking of line 10 to line 5

V - CONCLUSION

In the Spring of 2011, in Damascus, at Dar al-Assad-Opera House, I presented my version of this text with some emotion, as the original tablet was resting only a few hundred metres away. I was quite anxious about a possible negative reaction of *maqam* masters present during my presentation. To the contrary, some started to hum as if they had known the music from some distant memory, perhaps anchored in their genetic build up. Later, we engaged in enthusiastic discussions and the terms *bayati* and *Hijazi* recurred. These musicians naturally felt the need to emphasize certain pitches in the subsets and it became obvious that there was a direct link between Babylonian music theory, the Hurrian songs and *maqam* music. A year later, we recorded the song, sadly not at Ugarit, but at Byblos. The recording is available at the following link:

http://www.youtube.com/watch?v=gynhfxQ1IO4